

FIG. 1A

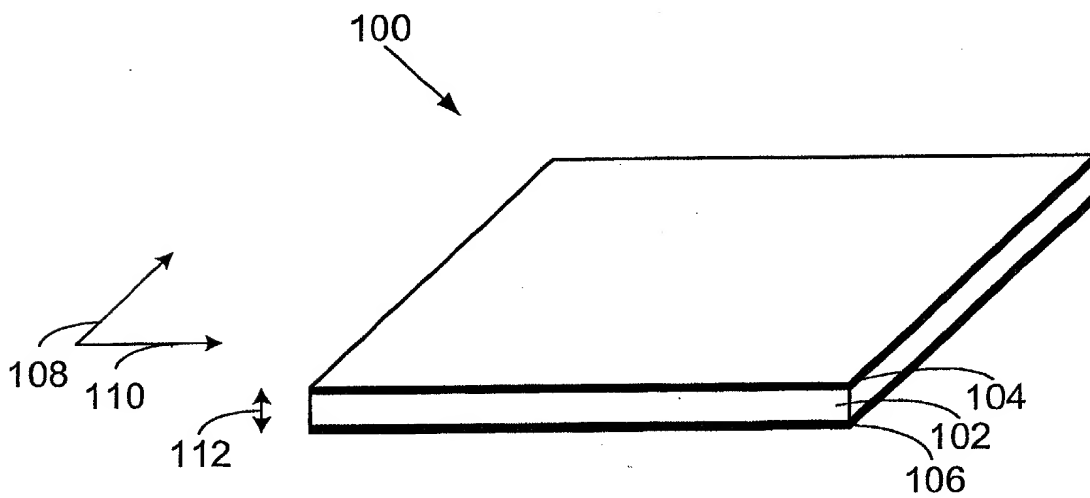


FIG. 1B

000240 04957950

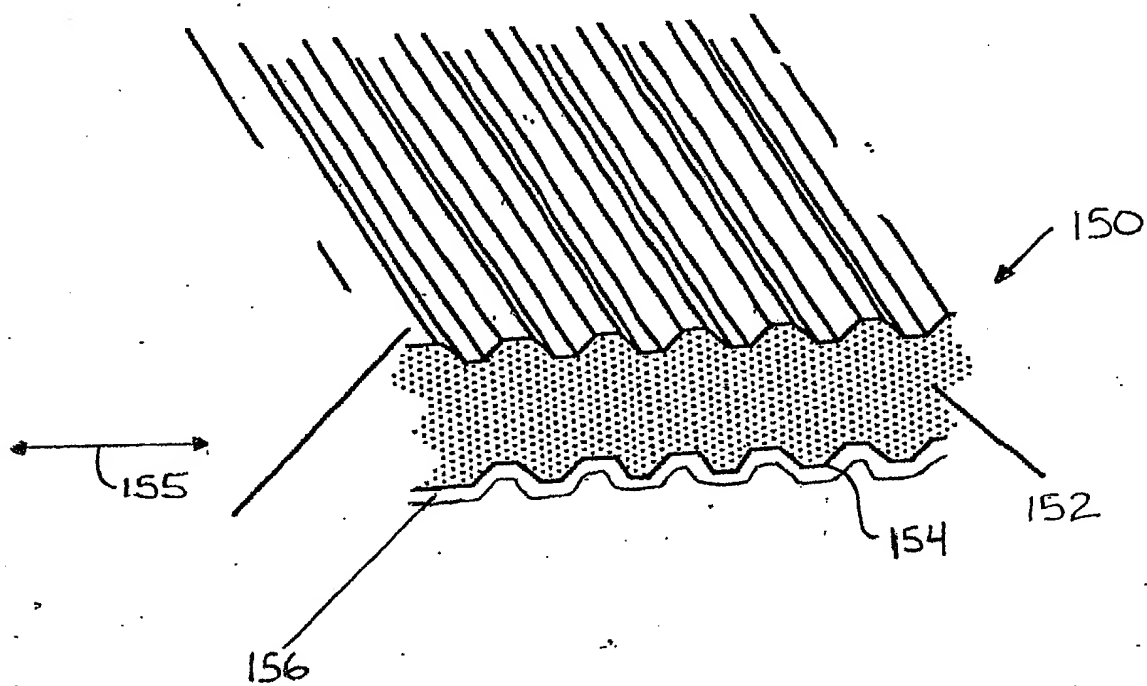
[illegible]

FIG. 1C

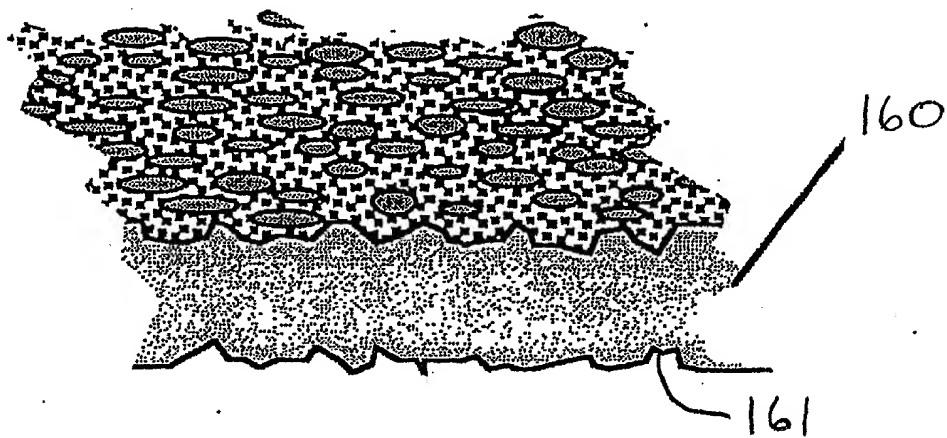


FIG. 1D

130

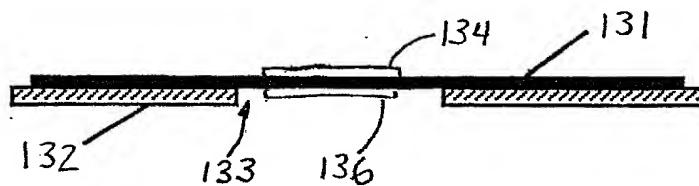


FIG. 1E

130

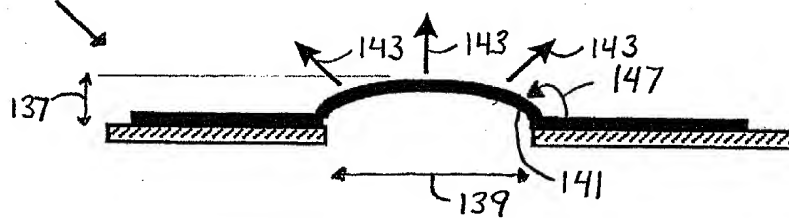


FIG. 1F

255

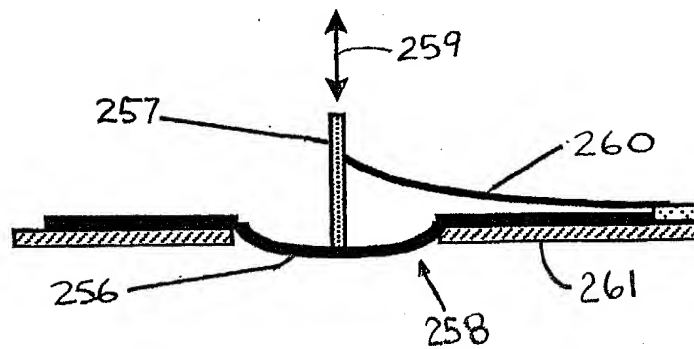
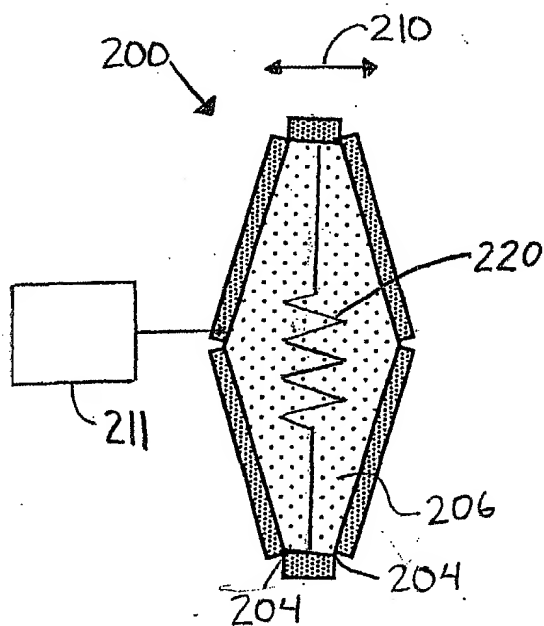
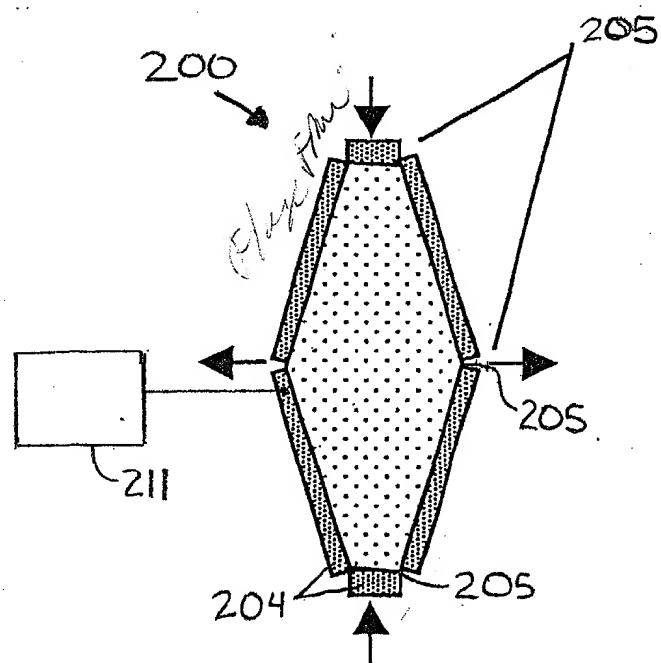
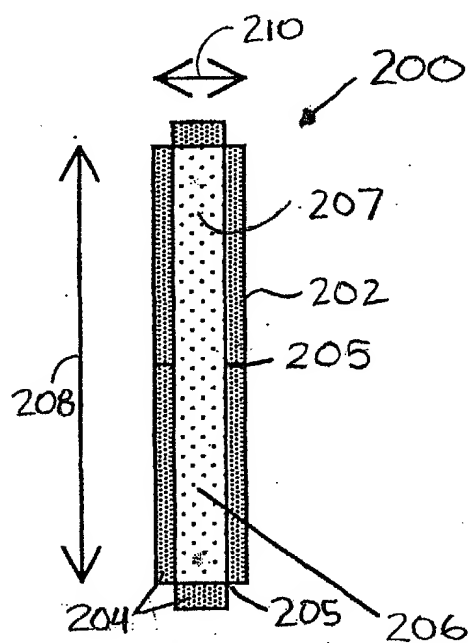
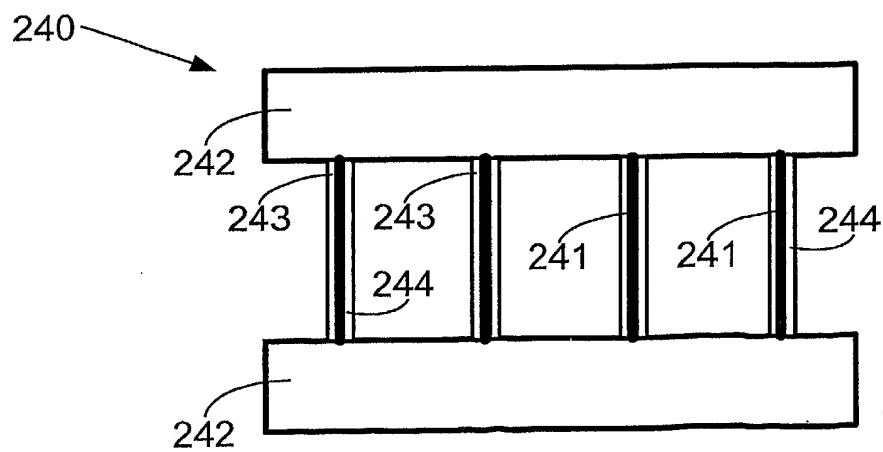
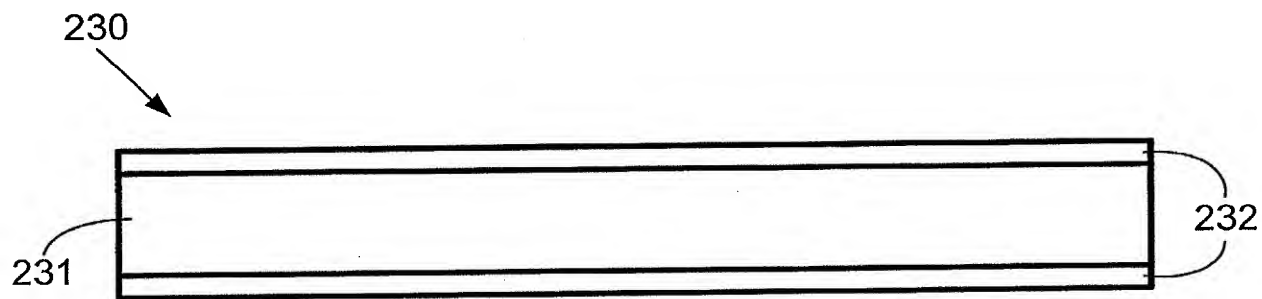
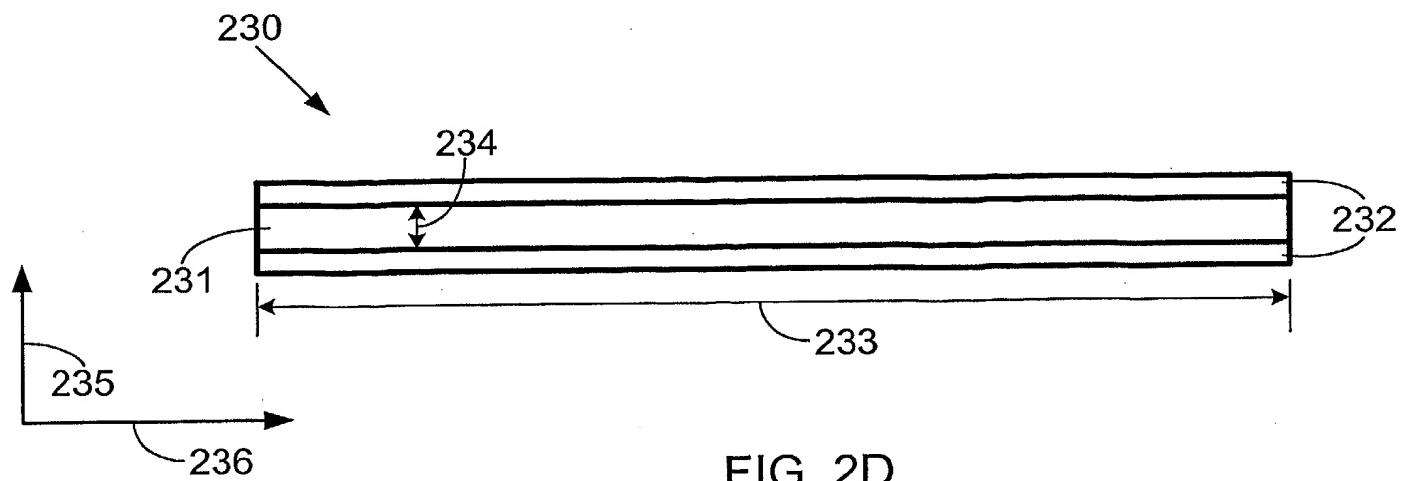


FIG. 2H





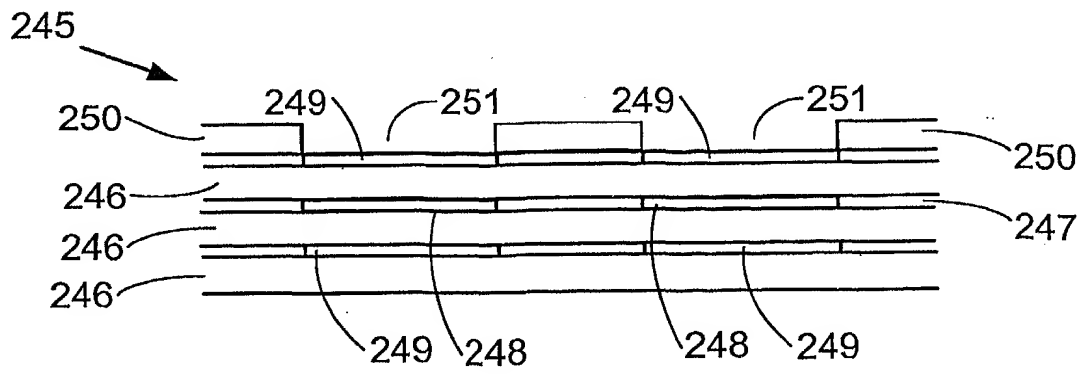


FIG. 2G

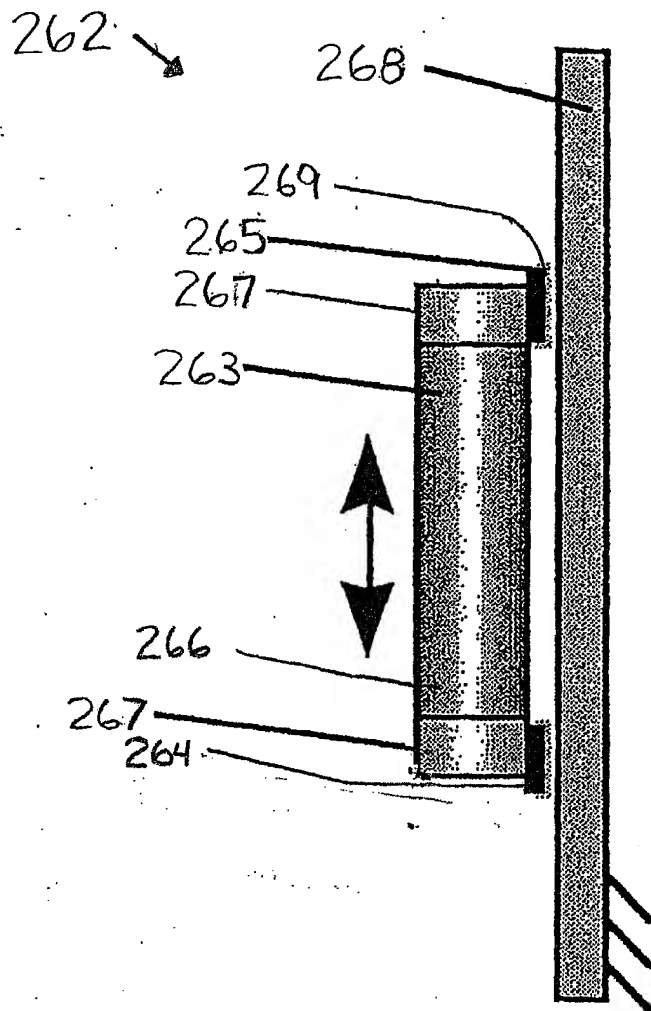


FIG. 2I

000270 84867960

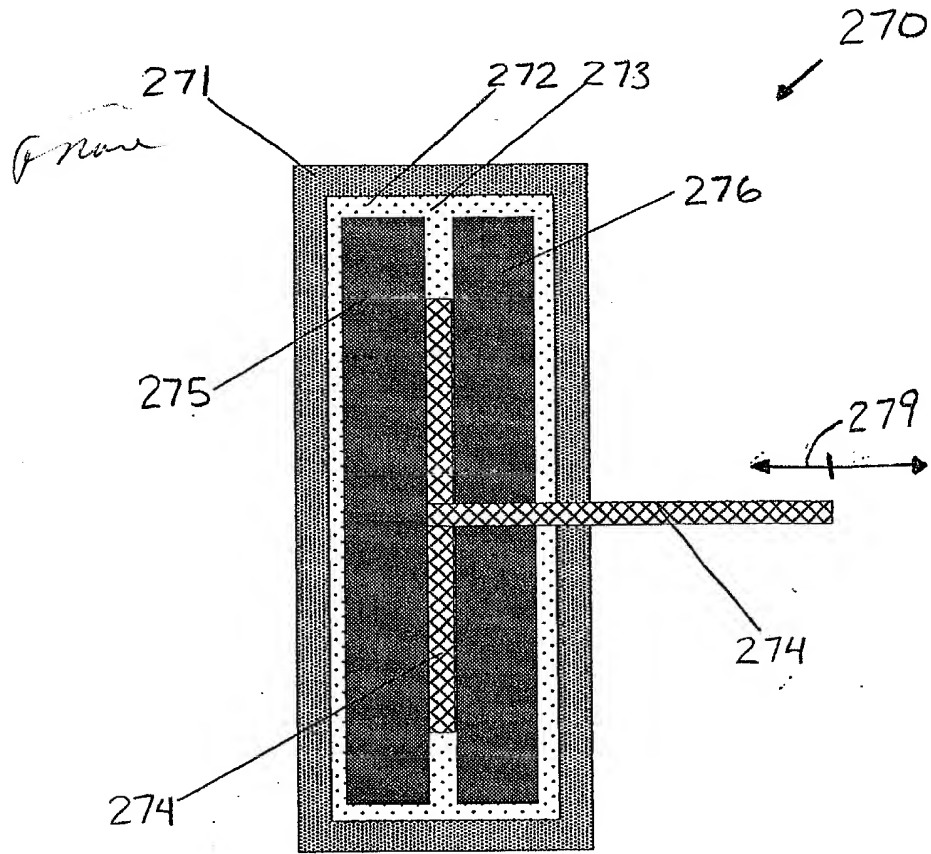


FIG 2J



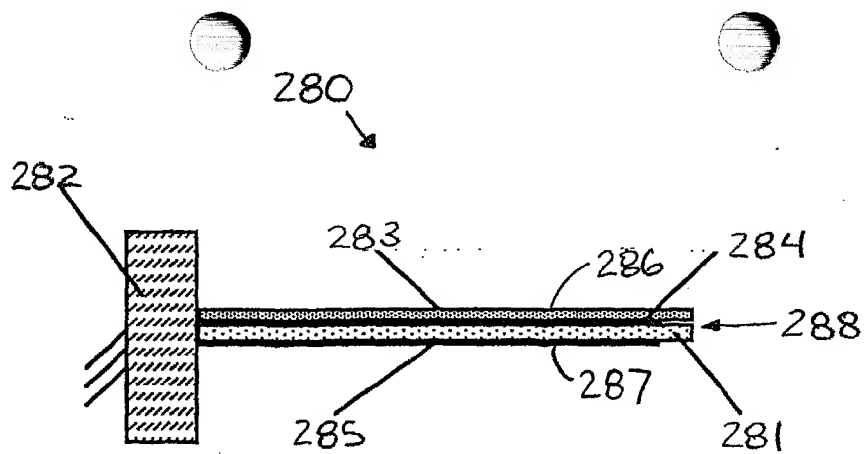


FIG. 2K

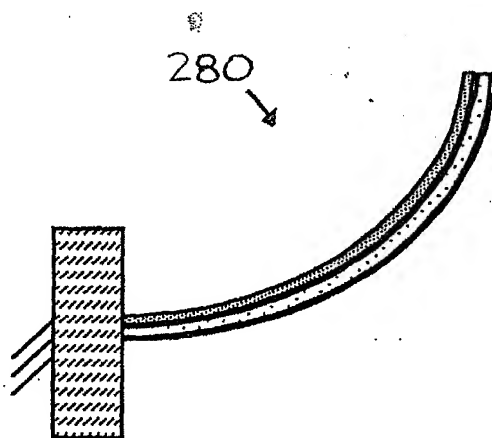


FIG. 2L

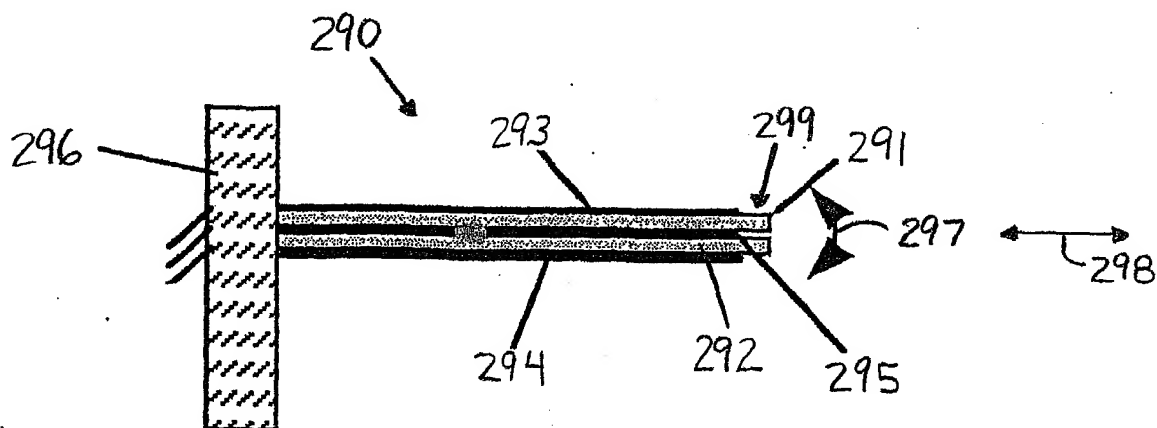


FIG. 2M

300

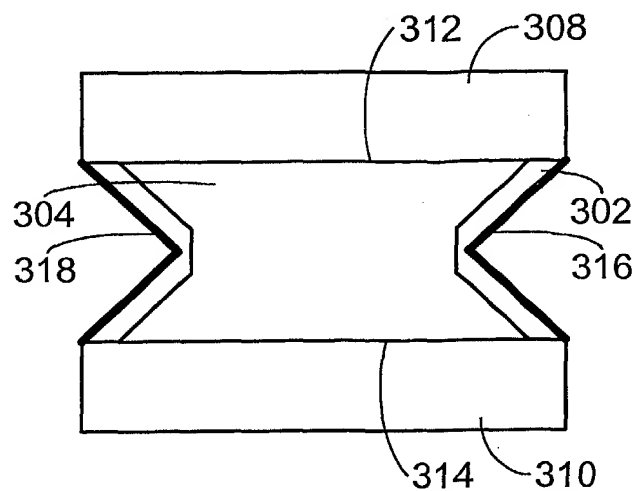


FIG. 2N

300

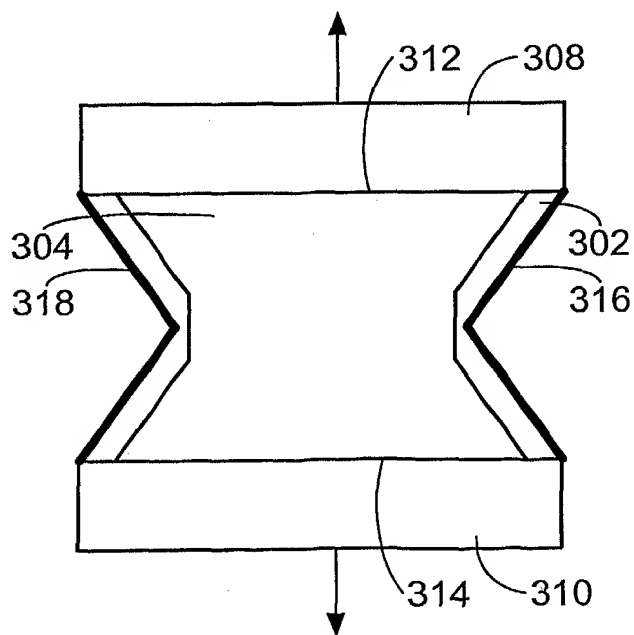


FIG. 2O

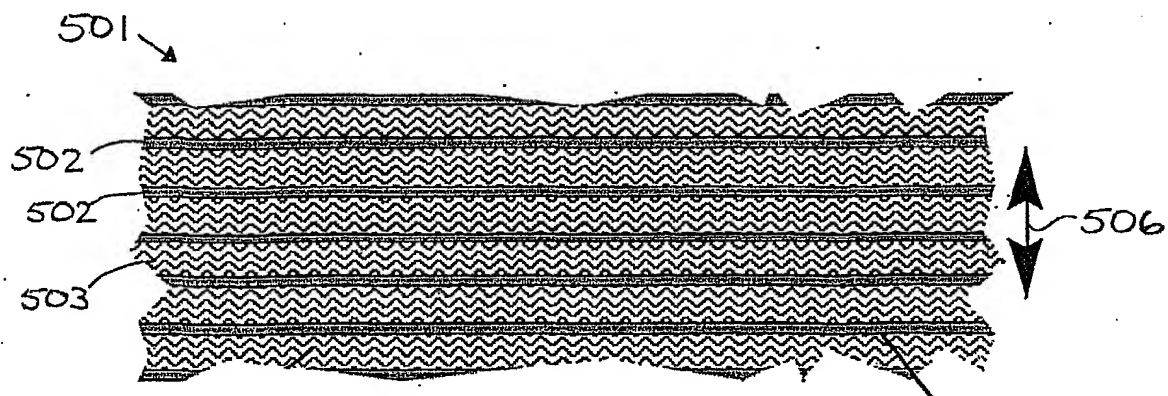


FIG. 3

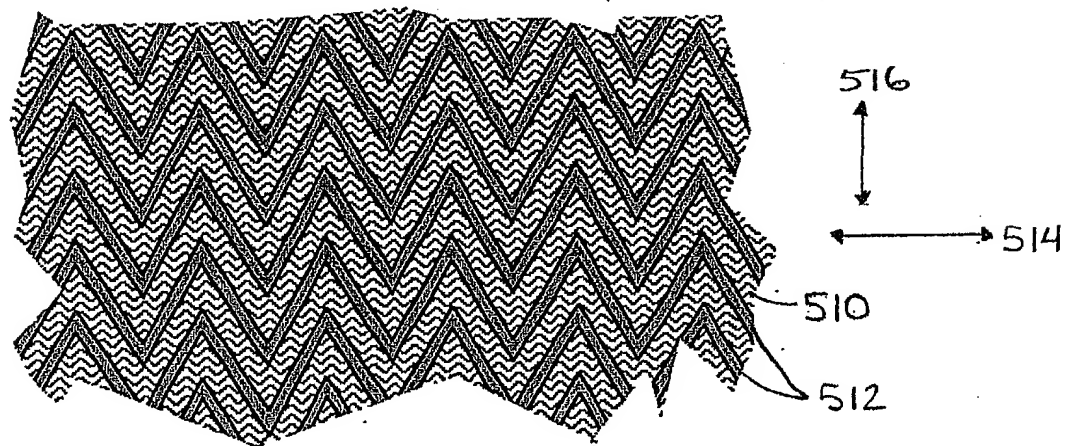


FIG. 4

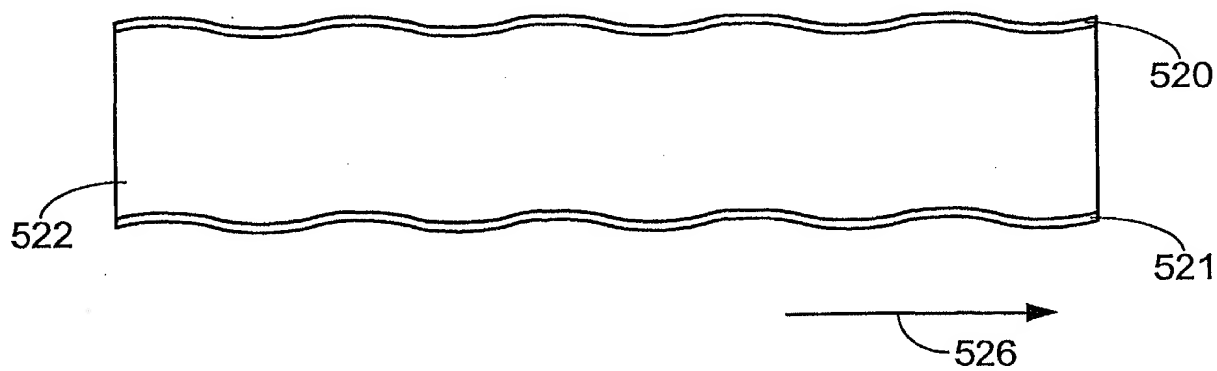


FIG. 5

A schematic diagram of a two-chambered pump assembly. The assembly consists of two main chambers, 552 on the left and 551 on the right, connected by a central shaft with two pumps, 555 and 556. Chamber 552 has a curved top wall 550 and a vertical wall 546. Chamber 551 has a curved top wall 544 and a vertical wall 545. A vertical piston rod 548 is connected to the top wall 544 of chamber 551 and extends upwards through a seal 553. A large circular component 560 is attached to the top of the piston rod 548. Arrows 542 and 540 point to the left and right sides of the assembly, respectively. Arrows 547 and 548 point to the seals at the top of the chambers. Arrows 550 and 551 point to the curved top walls of the chambers. Arrows 552 and 553 point to the vertical walls of the chambers. Arrows 554 and 555 point to the two pumps on the central shaft. Arrows 556 and 557 point to the seals at the bottom of the chambers. Arrows 558 and 559 point to the inlet and outlet ports of the left chamber.

FIG. 6

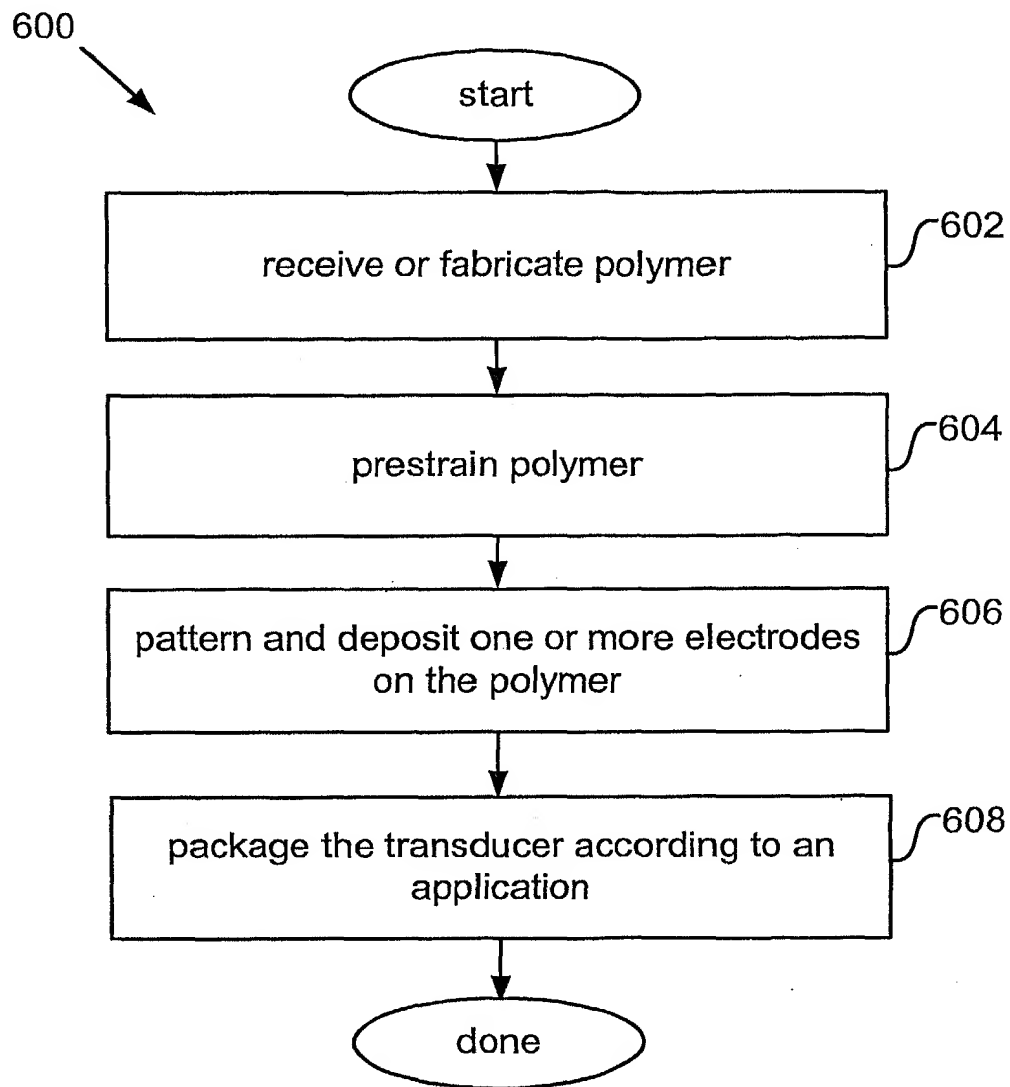


FIG. 7A

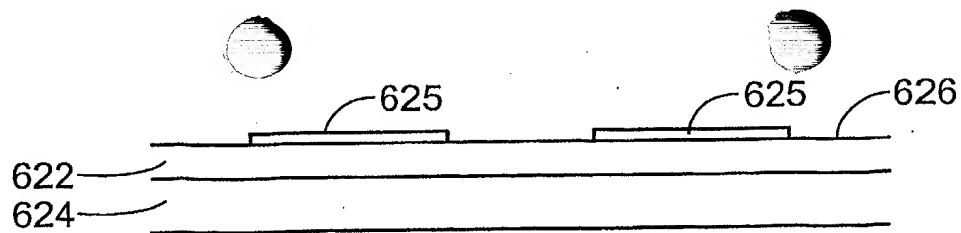


FIG. 7B

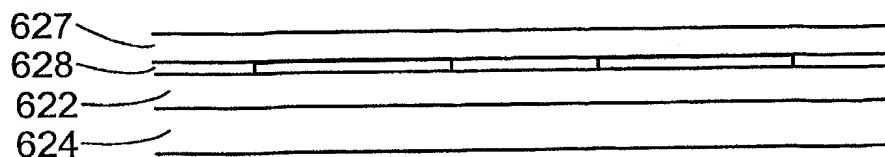


FIG. 7C

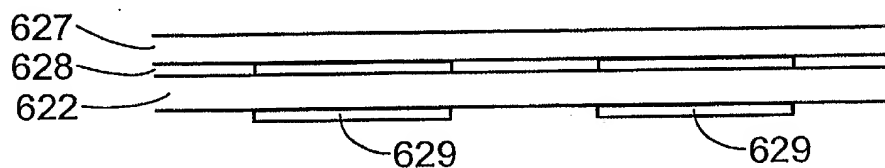


FIG. 7D

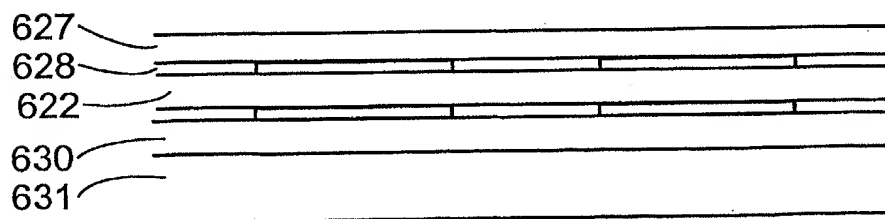


FIG. 7E

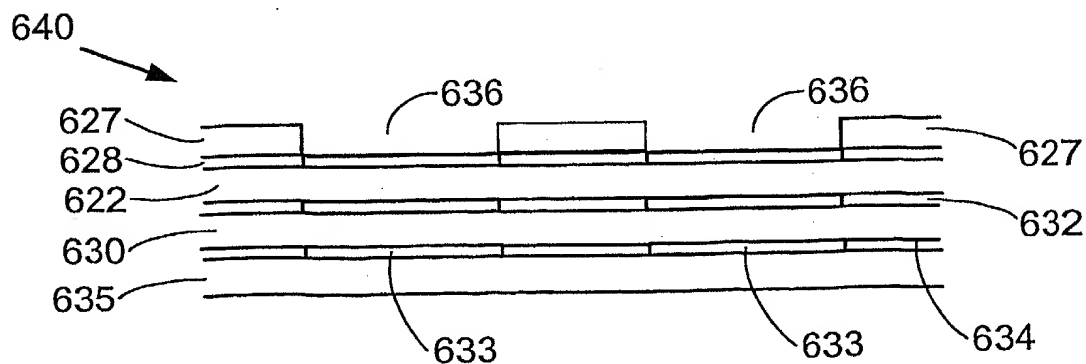


FIG. 7F